

REMARKS

In the Office Action mailed April 27, 2007, the Examiner rejected claims 1-3, 8-30, 33-35 and 41-61 under §102(b) as being anticipated by the Ehlers et al. U.S. Patent No. 5,572,438. Claims 9 and 40 were rejected under §103(a) as being unpatentable over the Ehlers '438 reference in view of official notice taken by the Examiner.

The applicant wishes to thank the Examiner for the time taken to discuss the cited Ehlers '438 reference with the undersigned attorney and to discuss the features of the present invention not shown or taught by the inventor's own prior U.S. Patent No. 5,572,438. Based upon the discussion with the Examiner, the applicant has revised the claims in the pending application to more particularly point out and distinctly claim the features of the invention that are not shown or taught by the cited prior art reference. Reconsideration is respectfully requested in view of the claim amendments as well as the following arguments for allowance.

Independent Claim 1

By the present response, independent claim 1 has been amended to more particularly state that the claim requires the step of measuring the instantaneous rate at which the commodity is being delivered to the subset of devices and sending the instantaneous rate of commodity consumption for each device within the subset to the utility in real time. At the utility, the claim further requires the step of determining, in real time, the capacity of commodity that can be managed by the utility by activating the energy management program, where the capacity is determined by the instantaneous rate at which the commodity is being delivered to the subset of the plurality of devices. Once the capacity of the commodity that can be managed by the utility is determined, the utility selectively activates the energy management program to manage the use of the commodity. After the energy management program has been activated, the method determines at least one of a rate and a change in a rate at which the commodity is being delivered to the subset of devices.

As described in the specification of the present application, the method of claim 1 allows the utility to determine the amount of commodity that is being consumed by a plurality of devices in real time. Based upon this known, measured consumption value, the utility can determine the amount of capacity of the commodity that can be managed by activating the energy management program. If the utility determines that the usage of the commodity needs to be managed, the utility can selectively activate the energy management program to manage the usage of the commodity. Following activation of the energy management program, the method determines at least one of a rate and a change in a rate at which the commodity is being delivered to the subset of the devices after activation of the energy management program. The step of determining the rate or change in rate of the commodity consumption after the activation of the program allows the utility to determine whether the activation of the program has been successful at managing the usage of the commodity.

In the Office Action, the Examiner rejected claims 1 and 2 based solely upon the Ehlers '438 reference. In rejecting these claims, the Examiner stated that the Ehlers '438 reference taught the step of sending the instantaneous rate of commodity consumption for each device within the subset to the utility in real time. The Examiner cited col. 15, lines 5-8 of the Ehlers '438 reference to show this feature required by claim 1.

The applicant hereby disagrees with such finding by the Examiner. The Ehlers '438 reference cited by the Examiner teaches that a first microcomputer 18 can communicate with the power company to receive real-time energy rate broadcasts, load shedding requests and to send to the utility power outage reports, low voltage condition reports, customer usage reports and selected other data. Nowhere in this teaching does the Ehlers '438 reference contemplate sending instantaneous commodity consumption rate information to the utility, in real time.

To the contrary, the Ehlers '438 reference, in col. 28, line 56 to col. 29, line 6, teaches that the system provides the ability to forward energy consumption information

from the customer premise to the utility company. As specifically set forth, the forwarding operation is initiated by the customer or by the utility company as a request for the consumption information. The stored historic consumption information is contained on the microcomputer at the customer's premise and is date-and-time stamped, to facilitate time of day and other variable rate billing operations (see col. 28, lines 62-64). This portion of the Ehlers '438 reference clearly indicates that the energy consumption information is stored at the meter and the information is date-and-time stamped such that when the information is relayed to the utility, at some later time, the energy consumption information can be correlated to the date-and-time when the energy was consumed. If this information were sent to the utility in real time, as the Examiner states, the information would not be stored on the microcomputers and would not need to be date-and-time stamped, as is explicitly set forth in this portion of the Ehlers '438 reference.

Clearly, the Ehlers '438 reference does not teach or contemplate sending the instantaneous rate of commodity consumption for each device within the subset of devices to the utility in real time. Instead, the Ehlers '438 reference specifically teaches that the energy consumption information is stored on a microcomputer and relayed to the utility only after the forwarding operation is initiated by either the customer or the utility company. Thus, the Ehlers '438 reference clearly does not teach or suggest, nor render obvious, this limitation required by claim 1.

Claim 1 has also been amended to indicate that the utility determines, in real time, the capacity of the commodity that can be managed by the utility by activating the energy management program. This feature is not shown or taught, nor rendered obvious, by any subject matter contained with the Ehlers '438 reference.

Claim 1 further requires the step of measuring, in real time, at least one of a rate and a change in a rate at which the commodity is being delivered to the subset of the devices after activation of the energy management program. In rejecting this portion of

original claim 2, the Examiner again relied upon col. 15, lines 5-8 of the Ehlers '438 reference. As discussed above, the Ehlers '438 reference does not teach or suggest sending instantaneous rate of commodity consumption to the utility in real time. Further, claim 2 requires measuring, in real time, the rate or change in rate of the commodity consumption after activation of the energy management program. Clearly, the Ehlers '438 reference does not teach or suggest this limitation required by independent claim 1.

For at least the above reasons, independent claim 1 is believed to be allowable over the Ehlers '438 reference cited by the Examiner.

Claims 3, 8-30 depend directly or indirectly from claim 1 and are thus believed to be allowable based upon the above arguments for allowance, as well as in view of the subject matter of each claim. Further, originally withdrawn claims 4-7 now depend directly or indirectly from allowable claim 1 and are thus believed to be properly included within the present application. Upon allowance of independent claim 1, the applicant requests the Examiner to reinstate previously withdrawn claims 4-7.

Claim 3, like amended claim 1, includes the step of determining a change in the rate of consumption of the commodity, in real time, after activation of the energy management program. As described above, the Ehlers '438 reference does not teach or suggest determining an actual rate and change of consumption of the commodity in real time. Instead, the Ehlers '438 reference teaches storing the energy consumption information and retrieving the stored information from a microcomputer upon a request from the customer or the utility. Thus, claim 3 is believed to be allowable over the Ehlers '438 reference cited by the Examiner.

Claim 13 further requires the step of allowing the customer to selectively cancel the energy management program after the energy management program is activated. When rejecting this claim, the Examiner relied upon col. 32, line 57 to col. 33, line 3 of the Ehlers '438 reference. Once again, the applicant strongly disagrees with such finding by the Examiner. In this portion of the Ehlers '438 reference, the Ehlers '438 reference

simply states that when a customer changes suppliers, the utility company can obtain a remote meter reading from the customer's meter. This portion of the application indicates that a customer will be allowed to change suppliers and the specification does not even suggest that a customer could cancel the energy management program after the energy management program had been activated by the utility. Clearly, the Ehlers '438 reference does not teach this claim element.

Independent Claim 33

Independent claim 33 has also been amended to more specifically define a system to provide an energy management program to a customer of a utility where the system includes a control system coupled to the distribution network for controlling delivery of the commodity and activating the energy management program. Further, the system includes a node adapted to measure the rate at which the commodity is being delivered to the subset of devices and sending the instantaneous rate for each device within the subset to the utility, in real time. The node is also adapted to measure the rate at which the commodity is being delivered to the subset of the devices after activation of the energy management program and to send this measured rate to the control system such that the control system can determine the consumption of the commodity after activation of the program.

As described above in the arguments for allowance of independent claim 1, the Ehlers '438 reference does not teach these features of claim 33. Instead, the Ehlers'438 reference teaches a microcomputer at the individual consumer's physical location that records energy consumption information and, upon request from the utility or the customer, transmits the information to the utility. The information relayed to the utility is stored on the microcomputer and is date-and-time stamped to facilitate time of day and other variable rate billing operations.

Clearly, the Ehlers '438 reference does not teach or suggest, nor render obvious, the sending of instantaneous rate information to the utility in real time and the

measurement of the reduction in consumption after the activation of the energy management program, again in real time. Based upon these distinctions, independent claim 33 is believed to be allowable over the Ehlers '438 reference cited by the Examiner.

Claims 35 and 40-61 depend directly or indirectly from claim 33 and are thus believed to be allowable based upon the above arguments for allowance, as well as in view of the subject matter of each claim.

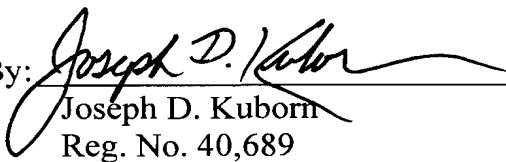
Conclusion

Based upon the above claim amendments and arguments for allowance, claims 1, 3, 8-30, 33, 35 and 40-61 are believed to be allowable over the Ehlers '438 reference cited by the Examiner. In addition, previously withdrawn claims 4-7 and 36-39 now depend from allowable independent claims and it is respectfully requested that these claims be reinstated into the pending application.

The Examiner is invited to contact the applicant's undersigned attorney with any questions or comments, or to otherwise facilitate prosecution of the present application.

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

By: 
Joseph D. Kuborn
Reg. No. 40,689

Andrus, Scales, Starke & Sawall, LLP
100 East Wisconsin Avenue, St. 1100
Milwaukee, WI 53202
(414) 271-7590